

JUN 13 2001

TECH CENTER 1600/2900

DATE: 05/08/2001
TIME: 11:42:22

Input Set : A:\corrected sequence listing US non-prov. Suga.txt
Output Set: N:\CRF3\05082001\I721414A.raw

**Does Not Comply
Corrected Diskette Needed**

3 <110> APPLICANT: Suga, Hiroaki
5 <120> TITLE OF INVENTION: Catalytic RNA Molecules with Aminoacylation Activity
7 <130> FILE REFERENCE: 11520.0222
10 <140> CURRENT APPLICATION NUMBER: US 09/721,414A
11 <141> CURRENT FILING DATE: 2000-11-22
13 <150> PRIOR APPLICATION NUMBER: US 60/167,331
14 US 60/214,382 → <150> US 60/214,382
15 <151> PRIOR FILING DATE: 1999-11-24
16 2000-06-28 → <151> 2000-06-28
18 <160> NUMBER OF SEQ ID NOS: 22
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 110
22 <212> TYPE: DNA
23 <213> ORGANISM: artificial sequence
25 <220> FEATURE:
W--> 26 <221> NAME/KEY: n represents a,t,g or c This goes on a <223> line (per 1.82)
27 <222> LOCATION: 21-90
28 <223> OTHER INFORMATION: synthetic oligonucleotide containing random pool of 70
29 nucleotides
31 <400> SEQUENCE: 1
W--> 33 ggatcgtcag tgcattgaga nnnnnnnnnn nnnnnnnnnn 40
W--> 34 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 80
W--> 35 nnnnnnnnnn ggtggatatcc ccaaggggta 110
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 76
39 <212> TYPE: DNA
40 <213> ORGANISM: artificial sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: completely synthesized primer complementary to the otrNAGln
45 <400> SEQUENCE: 2
46 tggctgcggt acgaggattc gaacctcgga atgccggatt 40
47 tagaaatccg gtcccttacc ccttgggggat accacc 76
50 <210> SEQ ID NO: 3
51 <211> LENGTH: 52
52 <212> TYPE: DNA
53 <213> ORGANISM: artificial sequence
55 <220> FEATURE:
56 <223> OTHER INFORMATION: 5' primer containing T7 promoter sequence
58 <400> SEQUENCE: 3
59 ggtaacacgc atatgtaata cgactcacta taggatcgtc 40
60 agtgcattga ga 52
62 <210> SEQ ID NO: 4
63 <211> LENGTH: 20
64 <212> TYPE: DNA
65 <213> ORGANISM: artificial sequence
67 <220> FEATURE:
68 <223> OTHER INFORMATION: 3' completely synthesized primer

223 of sequence
rules)
(create a new
<223> line)

RECEIVED

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70 <400> SEQUENCE: 4
71 tggctgctggt acgaggattc                20
73 <210> SEQ ID NO: 5
74 <211> LENGTH: 146
75 <212> TYPE: RNA
76 <213> ORGANISM: artificial sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: pre-12 catalytic RNA
81 <400> SEQUENCE: 5
82 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu        40
83 aacggugggu cauggguauu ggcguuaggu gcgggaugcu        80
84 acgcuggugg uauccccaag gguacgggac cggacauucg       120
85 agauucgaau ccucguaccg cagcca                    146
88 <210> SEQ ID NO: 6
89 <211> LENGTH: 151
90 <212> TYPE: RNA
91 <213> ORGANISM: artificial sequence
93 <220> FEATURE:
W--> 94 <221> NAME/KEY: n represents a, t, g or c
95 <222> LOCATION: 12
96 <223> OTHER INFORMATION: pre-38 catalytic RNA
98 <400> SEQUENCE: 6
OK 99 ggaucgucag uncauugaga uuuccgcagc ccuucucacu        40
100 aacggugggu ucauggguau uggcguuagg ugcggaugc        80
101 uacuacgcug gugguauccc caaggguaacg ggaccggauc       120
102 auucgagauu cgaauccucg uaccgcagcc a                151
105 <210> SEQ ID NO: 7
106 <211> LENGTH: 150
107 <212> TYPE: RNA
108 <213> ORGANISM: artificial sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: pre-29 catalytic RNA
114 <400> SEQUENCE: 7
115 ggaucgucag ugcauugaga uuuccgcagg ccuucucac        40
116 uaacgguggg ucauggguau uggcguuagg ugcggaugc        80
117 uacuacgcug gugguauccc caaggguaacg ggaccggaca       120
118 uucgagauuc gaauccucgu accgcagcca                    150
120 <210> SEQ ID NO: 8
121 <211> LENGTH: 150
122 <212> TYPE: RNA
123 <213> ORGANISM: artificial sequence
125 <220> FEATURE:
126 <223> OTHER INFORMATION: pre-36 catalytic RNA
128 <400> SEQUENCE: 8
129 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu        40
130 aacggugggu cauggguauu ggcguuaggu gcgggaugcu        80
131 acuacgcugg ugguaucccc aaggguaacg gaccggauca       120
132 uucgagauuc gaauccucgu accgcagcca                    150
134 <210> SEQ ID NO: 9

```

*"t" is not permitted in an RNA sequence - use "u" instead
more explanation to 2237*

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135 <211> LENGTH: 150
136 <212> TYPE: RNA
137 <213> ORGANISM: artificial sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: pre-24 catalytic RNA
142 <400> SEQUENCE: 9
143 ggaucgucag ugcauugaga uuuccgcagg ccuucucac 40
144 uaacgguggg ucauggguau uggcguuagg ugcgggaugc 80
145 uacuacgcug gugguauccc caaggguaacg ggaccggaca 120
146 uucgagauuc gaaucucgu accgcagcca 150

148 <210> SEQ ID NO: 10
149 <211> LENGTH: 149
150 <212> TYPE: RNA
151 <213> ORGANISM: artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: pre-25 catalytic RNA
156 <400> SEQUENCE: 10

157 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu 40
158 aacggugggu cauggguauu ggcguuaggu gcgggaugcu 80
159 acuacgcugg ugguaucucc aaggguaacg gaccggacau 120
160 ucgagauucg aaucucgua ccgcagcca 149

163 <210> SEQ ID NO: 11
164 <211> LENGTH: 149
165 <212> TYPE: RNA
166 <213> ORGANISM: artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: pre-22 catalytic RNA
171 <400> SEQUENCE: 11

172 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu 40
173 aacggugggu cauggguauu ggcguuaggu gcgggaugcu 80
174 acuacgcugg ugguaucucc aaggguaacg gaucggacau 120
175 ucgagauucg aaucucgua ccgcagcca 149

178 <210> SEQ ID NO: 12
179 <211> LENGTH: 149
180 <212> TYPE: RNA
181 <213> ORGANISM: artificial Sequence
183 <220> FEATURE:

W--> 184 <221> NAME/KEY: n represents a ^ug or c *← move explanation to <223>*
185 <222> LOCATION: 112
186 <223> OTHER INFORMATION: pre-5 catalytic RNA
188 <400> SEQUENCE: 12

189 ggaucgucag ugcauugaga uuuccgcagc ccuucucacu 40
190 aacggugggu cauggguauu ggcguuaggu gcgggaugcu 80
OK-> 191 acuacgcugg ugguaucucc aaggguaacg gnccggacau 120
192 ucgagauucg aaucucgua ccgcagcca 149

195 <210> SEQ ID NO: 13
196 <211> LENGTH: 149
197 <212> TYPE: RNA
198 <213> ORGANISM: artificial Sequence

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200 <220> FEATURE:
201 <223> OTHER INFORMATION: pre-19 catalytic RNA
203 <400> SEQUENCE: 13
204 ggauugcag ugcauugaga uuuccgcagc ccuucucacu      40
205 aacggguaggu cauggguaau ggcguuaggu gcgggaugcu      80
206 acuacgcugg ugguaucccc aagguuacgg gaccggacau     120
207 ucgagauucg aauccucgua ccgcagcca                  149
210 <210> SEQ ID NO: 14
211 <211> LENGTH: 150
212 <212> TYPE: RNA
213 <213> ORGANISM: artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: pre-8 catalytic RNA
218 <400> SEQUENCE: 14
219 ggauugcag ugcauugaga uuuccgcagc ccuucucacu      40
220 aacgguggggu ucauggguaau uggcguuagg ugcgggaugc      80
221 uacuacgcug gugguaucuu caaggguaacg ggaccggaca     120
222 uucuagauuc gaaucucgu accgcagcca                  150
225 <210> SEQ ID NO: 15
226 <211> LENGTH: 148
227 <212> TYPE: RNA
228 <213> ORGANISM: artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: pre-23 catalytic RNA
233 <400> SEQUENCE: 15
234 ggauugcag ugcauugaga uuuccgcagc ccuucucacu      40
235 aacgguggggu cauggguaau ggcguuaggu gcgggaugcu      80
236 acuacgcugg ugguauccca aggguaacgg accggacauu     120
237 cgagauucga auccucguac cgcagcca                  148
240 <210> SEQ ID NO: 16
241 <211> LENGTH: 75
242 <212> TYPE: RNA
243 <213> ORGANISM: Escherichia coli
245 <220> FEATURE:
246 <223> OTHER INFORMATION: otrNA
248 <400> SEQUENCE: 16
249 ggugguaucc ccaaggggua agggaccgga uucuaaaucc      40
250 ggcauuccga gguucgauc cucguaccgc agcca            75
252 <210> SEQ ID NO: 17
253 <211> LENGTH: 160
254 <212> TYPE: RNA
255 <213> ORGANISM: artificial sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: H2 Leu catalytic RNA
260 <400> SEQUENCE: 17
261 ggauugcag ugcauugaga ugcccaaagc ccuucucacu      40
262 uccgguggggu caugcguuau ugcguuaggu gaggaugcu      80
263 aguaugcggg ugguauccaa gggguaaggg accggauucu     120
264 aaaucggcau uccgagguuc gaaucucgu accgcagcca      160

```

RAW SEQUENCE LISTING
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Input Set : A:\corrected sequence listing US non-prov. Suga.txt
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266 <210> SEQ ID NO: 18
267 <211> LENGTH: 156
268 <212> TYPE: RNA
269 <213> ORGANISM: artificial sequence
271 <220> FEATURE:
272 <223> OTHER INFORMATION: D1-Leu catalytic RNA
274 <400> SEQUENCE: 18
275 ggauugcag ugcaugaga uagugucacu aggcgggggg 40
276 ugauagcgca uuuugagggu ugguuugggg gguuaugcgu 80
277 gaguucuugg gugguaacca agggguaagg gaucuaaauc 120
278 cgacauuccg agguucgaau ccucguaccg cagcca 156
281 <210> SEQ ID NO: 19
282 <211> LENGTH: 35
283 <212> TYPE: RNA
284 <213> ORGANISM: artificial sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: RNA forming a minihelix
289 <400> SEQUENCE: 19
290 ggugguacga gguucgauc cucguaccgc agcca 35
292 <210> SEQ ID NO: 20
293 <211> LENGTH: 73
294 <212> TYPE: RNA
295 <213> ORGANISM: artificial sequence
297 <220> FEATURE:
298 <223> OTHER INFORMATION: V1 variant of otrNA
300 <400> SEQUENCE: 20
301 ggugguaucc ccaagggua gggaccggau ucuaaauccg 40
302 gcauucgaga uucgaauccu cguaccgcag cca 73
304 <210> SEQ ID NO: 21
305 <211> LENGTH: 75
306 <212> TYPE: RNA
307 <213> ORGANISM: artificial sequence
309 <220> FEATURE:
310 <223> OTHER INFORMATION: V2 variant of otrNA
312 <400> SEQUENCE: 21
313 ggugguaucc ccaagggua cggaccggau ucuaaaucc 40
314 ggcauuccga gauucgauc cucguaccgc agcca 75
317 <210> SEQ ID NO: 22
318 <211> LENGTH: 73
319 <212> TYPE: RNA
320 <213> ORGANISM: artificial sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: V3 variant of otrNA
325 <400> SEQUENCE: 22
327 ggugguaucc ccaagggua gggaccggau ucuaaauccg 40
328 gcauucgagg uucgaauccu cguaccgcag cca 73

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VERIFICATION SUMMARY

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Input Set : A:\corrected sequence listing US non-prov. Suga.txt

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L:14 M:259 W: Allowed number of lines exceeded, <150> PRIOR APPLICATION NUMBER:
L:16 M:259 W: Allowed number of lines exceeded, <151> PRIOR FILING DATE:
L:26 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:1
L:33 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:35 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:94 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:6
L:99 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:184 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12
L:191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12

US 097214140AP1



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Team: OIPEBackFileIndexing
Dossier: 09721414

Legal Date: 22-03-2001

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11	NPL	6

Total number of pages: 96

Remarks:

Order of re-scan issued on